

### **DETAILED ACTION**

This Notice of Allowance is responsive to the Amendment filed February 25, 2009. Claim 29 is amended. Claims 1-28, 30, and 38-40 were previously cancelled. Claims 43-62 are new. Claims 29, 43, and 53 are independent. Claims 29, 31-37, and 41-62 remain pending.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in telephone interviews with David J. McKenzie (Reg.#46,919) on June 15, 2009 and July 31, 2009.

The application has been amended as follows:

#### **In the claims:**

43. (Currently Amended) A utility comprising a program storage medium readable by a processor and embodying one or more instructions for automatically

generating a web interface for a MFS-based IMS application, comprising:

an interface configured to accept a parameter set provided as a single input;

an import module configured to import MFS-based IMS source files

corresponding to an MFS-based IMS application;

a metadata generator configured to generate and store at least one eXtended Markup Language Metadata Interchange (XMI) file comprising a standardized metadata description of MIDs/DIFs pairs and MODs/DOFs pairs for the MFS-based IMS application associated with the imported MFS-based IMS source files;

a code generator configured to generate a middleware application from the at least one XMI file, the middleware application configured to interface between a client application and the MFS-based IMS application; and

a deployment module configured to automatically deploy without human intervention the generated at least one XMI file and middleware application to one or more servers.

48. (Currently Amended) The utility of claim ~~48~~ 47, wherein one mode comprises a batch mode that reads the parameter set from persistent storage.

50. (Currently Amended) The ~~method~~ utility of claim 43, wherein the import module is configured to import a plurality of MFS-based IMS source files from a single directory in response to a single parameter.

51. (Currently Amended) The ~~method~~ utility of claim 49, wherein one mode comprises a novice mode that prompts a user for each parameter in the parameter set.

52. (Currently Amended) The ~~method~~ utility of claim 51, wherein one mode comprises an expert mode that prompts the user to enter the parameter set as a single entry.

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58. (Currently Amended) The article of manufacture of claim ~~58~~ 57, wherein one mode comprises a batch mode that reads the parameter set from persistent storage.

***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance:

The instant claims recite a method, utility, and article of manufacture for generating a web interface for an MFS-based IMS application. The closest prior art are Bach (US 5,781,739, hereinafter Bach '739) and Bach et al. (US 6,141,660, hereinafter Bach '660).

Bach '739 teaches a method and apparatus that generates a web interface enabling a user to communicate with IMS-based applications using a web browser. Bach '739 does not teach providing an interface accepting a parameter set provided as a single input. Instead, Bach '739 teaches providing an input HTML form where multiple inputs are entered by the user to generate the web interface as output. Also, Bach '739 explicitly states that the invention does not use the information found in the DIFs and DOFs. Furthermore, Bach '739 is silent regarding the use of XMI files for generating the middleware application.

Bach '660 teaches a method, apparatus, and article of manufacture for generating class specifications for an object-oriented application that accesses a hierarchical database such as an IMS database. Bach '660 teaches providing a command line interface where a user may enter a parameter set as a single input via

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batch processing. However, Bach '660 does not teach the use of standardized metadata description of MIDs/DIFs pairs and MODs/DOFs pairs. Bach '660 also does not teach use of XMI files for generating the middleware application.

It would not have been obvious to one having ordinary skill in the art at the time the invention was made to combine Bach '739 and Bach '660 in such a manner as to arrive at the recited instant invention. Neither Bach '739 nor Bach '660 teach using DIFs/DOFs pairs for the MFS-based IMS application associated with the imported MFS-based IMS source files. Also, neither Bach '739 nor Bach '660 teach the use of XMI files for generating the middleware application. None of the prior art of record are found to show that these features would have been obvious to implement in Bach '739 and/or Bach '660.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Alvesteffer whose telephone number is (571)270-1295. The examiner can normally be reached on Monday-Friday 9:30AM-6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on (571)272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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